

Roof Vents and Fugitive Emissions

This activity applies if you have a process that vents emissions to the roof and/or if pollutants accumulate on your roof. Stormwater runoff from roofs of manufacturing and commercial buildings can be sources of pollutants if building vents and other air emission sources are not properly treated. Roof surfaces may accumulate hydrocarbons, solvents and other organic compounds, oils and greases, metals and other toxins and suspended solids. Operations that are of special concern include spray-paint booths, paint-stripping operations, electroplating shops, galvanizing operations, cement kiln dust, and grease from food preparation. BMPs for paint processes are given in this manual under “Painting, Finishing, and Coating of Vehicles, Products, and Equipment.”

The Puget Sound Clean Air Agency and/or the Washington State Department of Ecology may regulate air pollution control measures. If your activities are regulated by either of these agencies, these requirements are supplemental. Additionally, if you are covered under a NPDES Industrial Permit, and sampling for specific parameters is required, these BMPs may assist you in attaining your permit conditions. The WA DOE has final approval on meeting your NPDES requirements.

MINIMUM REQUIREMENTS

The following BMPs, or equivalent measures, methods, or practices are required if you have vents and/or air emissions:


1

Identify processes that are vented and may contribute pollutants to the roof. Install appropriate source control measures such as air pollution control equipment (filters, scrubbers, and other treatment) and operational or process changes. Maintain air filters and pollution control equipment on a regular basis to prevent pollutant fallout on your roof. If you smell odors from outside the building, chances are good the air filters or pollution control equipment needs maintenance or evaluation.


2

If proper installation and maintenance of air pollution control equipment does not prevent pollutant fallout on your roof, additional treatment of the roof runoff may be necessary. Install/provide appropriate devices for roof runoff before it is discharged off site. This may include water

quality treatment BMPs such as catch basin filters or structural stormwater treatment systems.



See BMP Info Sheet #9 – Catch Basin Inserts, BMP Info Sheet #10 – Catch Basin Sump and Vault Filters, and BMP info Sheet #11 – Leaf Compost Filters for treatment options.



Routine Maintenance: If maintenance of the roof requires application of chemicals, detergents, or other pollutant sources to remove accumulated emissions, a water collection device that enables collection of wash water and associated solids must be used to prevent pollutants entering the natural and constructed drainage system and waterways. A sump pump, wet vacuum or similarly effective device must be used to collect the runoff and loose materials. The collected runoff must be discharged to the sanitary sewer or be removed by a waste disposal company.



See BMP Info Sheet #4 – Disposal Options in Chapter 4 for information on disposal options.

For more information or assistance in implementing these best management practices, contact the King County Department of Natural Resources and Parks Stormwater Services Section at 206-296-1900.

Reader Note: The above requirements are the minimum required BMPs. If these BMPs fail to prevent discharges to the storm drainage system you will be asked to take additional measures to correct the continued pollution discharges.